



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/724,807
Filing Date: December 01, 2003
Appellant(s): SCHNELL, TIM

Larry L. Coats
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8 March 2007 appealing from the Office action mailed 8 March 2005 and the Administrative Remand to Examiner mailed December 16, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is incorrect. Appellant's Notice of Appeal filed 6/6/05 states"

"Applicant hereby appeals from the Examiner's final rejection of claims 1, 2, 4, 10, 11, 16, 18, 19, 21-28, 31, 33, and 34. This rejection of all claims is being appealed." Therefore

the rejection of claims 18 and 19 under 35 USC § 102 as anticipated by Miller et al. is subject to this appeal.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is substantially correct. It is noted that claim 18 is not a clean copy in that appellant has provide a commentary set off in parenthesis () and 19 has not been included in the claim listing. Claim 19 is included below.

19. The gang type lawn mower system of claim 18 wherein each mower deck is pivotally connected to one side of the power source frame through one or more pivot connections that permit each mower deck to swing about a longitudinal axis that extends adjacent the side area of the power source frame.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

Miller et al. US Pat. No. 2,682,740, July 6, 1954

Aron US Pat. No. 4,723,404, February 9, 1988

Allison US Pat. No. 4,346,547, August 31, 1982

Torras US Pat. No. 4,926,621, May 22, 1990

Erdman US Pat. No. 3,608,284, September 28, 1971

Bottenberg US Pat. No. 3,208,207, September 28, 1965

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2 and 16, 21, 22, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al., hereafter Miller, in view of Aron.

Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising:

- a. a wheel supported main frame (F);
- b. a power source (15) mounted on the main frame (F);
- c. at least two mower decks (67) connected to the main frame (F), each mower deck (67) having a rotary blade (72);
- d. each mower deck (67) being movably mounted to the main frame (F) and movable from an operative lowered position (see figures 1 and 2) where the mower deck (67) is operative to cut grass to an elevated stowed position (see figure 4) where at least a portion of the mower deck (67) overlies a portion of the main frame (F); and
- e. a drive (27, 31, 37) interconnected between the power source (15) and each of the mower decks (67) for driving each of the mower decks (67) whereby the mower decks (67) are driven by a single power source (15) mounted on the main frame (F), as per claim 1; and wherein the main frame (F) lies between two mower decks (67), and wherein in the lowered operative position the mower decks (67) extend outwardly from the main frame (F);
- a. wherein the main frame (F) does not include a blade for cutting grass; and
- b. each mower deck (67) being pivotally connected along one side of the main frame (F) such that when the mower deck (67) assumes a stowed position, the underside of the mower deck (67) faces at least partially upwardly and the entire mower deck (67) is supported by the main frame (F), as per claim 2; and

wherein the main frame (F) includes an upper platform (top of main frame F, see figure 3) having the power source (15) mounted thereon, as per claim 16.

However, Miller fails to disclose wherein in moving from the operative position to the stowed position each of the mower decks move through an angle of at least 91°, as per claim 1; and

Wherein in the stowed position at least a portion of the apparatus overlies a portion of the mainframe, as per claim 21; and

Wherein in the stowed position the underside of the apparatus faces upwardly and at least slightly outwardly, as per claim 22; and

wherein each mower deck is movable through an angle of at least 91° when moving from the operative position to the stowed position, as per claim 26; and

wherein each deck is pivotally connected to one side of the power source frame and pivotable through an angle of at least 91° as the mower deck moves between the operative and stowed position, as per claim 27.

Aron discloses a similar device wherein in moving from the operative position to the stowed position each of the apparatuses (3, 4) move through an angle of at least 91° (see column 3, lines 27-31), as per claim 1; and

Wherein in the stowed position at least a portion of the apparatus (3, 4) overlies a portion of the mainframe (2), as per claim 21; and

Wherein in the stowed position the underside of the apparatus (3, 4) faces upwardly and at least slightly outwardly, as per claim 22; and

wherein each apparatus (3, 4) is movable through an angle of at least 91° when moving from the operative position to the stowed position, as per claim 26; and

wherein each apparatus (3, 4) is pivotally connected to one side of the main frame (2) and pivotable through an angle of at least 91° as the apparatus (3, 4) moves between the operative and stowed position, as per claim 27.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivot angle of Aron on the device of Miller in order to reduce the bulk of the machine.

Claims 4 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and further in view of Allison.

The device is disclosed as applied above. However, Miller and Aron fail to disclose wherein the drive interconnected between the power source and the mower decks include a belt drive; and wherein the gang type lawn mower system includes a belt tensioner for maintaining a tension on the belt drive, as per claims 4 and 30.

Allison discloses a gang mower wherein the drive interconnected between the power source (29) and the mower decks (25, 26) include a belt drive (37); and wherein the gang type lawn mower system includes a belt tensioner (36) for maintaining a tension on the belt drive (37), as per claims 4 and 30.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the tensioner of Allison on the drive of Miller and Aron in order to tighten the belt.

Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and father in view of Torras, as cited by applicant.

The device is disclosed as applied to claim 1 above. However, Miller and Aron fail to disclose wherein the main frame includes at least two spaced apart caster wheels disposed on the front portion of the main frame.

Torras discloses a mower frame (30) including at least two spaced apart caster wheels (26, 27) disposed on the front portion of the main frame (30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the caster wheels of Torras on the mower of Miller and Aron in order to allow the mower to undulate and pivot.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and further in view of Erdman, as cited by applicant.

The device is disclosed as applied to claim 1 above. However, Miller and Aron fail to disclose at least one belt guard extending from the main frame over a portion of one mower deck for guarding a belt drive that forms a part of the drive interconnected between the power source and the mower decks, as per claim 11.

Erdman discloses a pull-behind gang mower including at least one belt guard (122, 124) extending from the main frame (64) over a portion of one mower deck (16, 18) for guarding a belt drive (118) that forms a part of the drive interconnected between the power source (116) and the mower decks (16, 18), as per claim 11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the guards of Erdman on the device of Miller and Aron in order to provide protection.

Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron as applied to claim 1 above, and further in view of Bottenberg.

The device is disclosed as applied above. However, the combination fails to disclose including a tongue pivotally connected to the mainframe about a transverse axis such that the tongue can move up and down about the axis, as per claim 23; and

including front and rear wheels secured to the mainframe, as per claim 24; and

including a tongue pivotally connected to the mainframe about a transverse axis such that the tongue can move up and down with respect to the mainframe about the axis; and wherein there is provided front and rear wheels mounted to the mainframe, as per claim 25.

Bottenberg discloses a similar gang mower including a tongue (18) pivotally connected to the mainframe (16) about a transverse axis such that the tongue (18) can move up and down about the axis, as per claim 23; and

including front (92) and rear (22) wheels secured to the mainframe (16), as per claim 24; and

including a tongue (18) pivotally connected to the mainframe (16) about a transverse axis such that the tongue (18) can move up and down with respect to the mainframe (16) about the axis; and wherein there is provided front (92) and rear (22) wheels mounted to the mainframe (16), as per claim 25.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller and Aron in order to achieve different cutting heights.

Claims 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Bottenberg.

Regarding claim 28, Miller fails to disclose front and rear wheels mounted to the power source frame; and a tongue pivotally connected to the power source frame and projecting therefrom and wherein the tongue is pivotally mounted about a transverse axis such that the tongue can be moved up and down about the axis, and with respect to the power source frame.

Bottenberg discloses front (92) and rear (22) wheels mounted to the frame (16); and a tongue (18) pivotally connected to the frame (16) and projecting therefrom and wherein the tongue (18) is pivotally mounted about a transverse axis such that the tongue (18) can be moved up and down about the axis, and with respect to the frame (16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller in order to achieve different cutting heights.

Regarding claim 33, Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising:

- a. a wheel supported mainframe (F);
- b. a power source (15) mounted on the mainframe (F);

c. at least two mower decks (67) connected to the mainframe (F), each mower deck (67) having a rotary blade (72);

d. each mower deck (67) being movably mounted to the mainframe (F) and movable from an operative lowered position where the mower deck (67) is operative to cut grass to an elevated stowed position;

e. a drive (27, 31, 37) interconnected between the power source (15) and each of the mower decks (67) for driving each of the mower decks (67) whereby the mower decks (67) are driven by a single power (15) source mounted on the mainframe (F).

However, Miller fails to disclose:

f. four wheels secured to the mainframe for supporting the mainframe;

e. a tongue pivotally connected to the mainframe about a transverse axis that permits the tongue to move up and down with respect to the mainframe and to pivot up and down about the main axis.

Bottenberg discloses a similar device including:

f. four wheels (22, 92) secured to the mainframe (16) for supporting the mainframe (16);

e. a tongue (18) pivotally connected to the mainframe (16) about a transverse axis that permits the tongue (18) to move up and down with respect to the mainframe (16) and to pivot up and down about the main axis.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller in order to achieve different cutting heights.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Bottenberg as applied to claim 33 above, and further in view of Aron.

The device is disclosed as applied above. However, the combination fails to disclose wherein each mower deck is pivotally mounted to the mainframe and movable through an angle of at least 91° as each mower deck moves from the operative position to the stowed position.

Aron discloses a similar device wherein each apparatus (3, 4) is pivotally mounted to the mainframe (2) and movable through an angle of at least 91° (see column 3, lines 27-31) as each apparatus (3, 4) moves from the operative position to the stowed position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivot angle of Aron on the device of Miller in order to reduce the bulk of the machine.

GROUND OF REJECTION NOT ON REVIEW

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief. Appellant concedes the examiner has made a prima facie case of anticipation.

Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al., hereafter Miller.

In regards to claims 18 and 19, Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising;

a. a power source frame (F) adapted to attach to the tractor and having an area for receiving and supporting an internal combustion engine (15) thereon;

b. an internal combustion engine (15) mounted on the power source frame (F) and having an output power shaft (16) extending therefrom;

c. the power source frame (F) having a plurality of wheels (48) and a pair of opposed side areas (see figure 1);

d. at least two mower decks (67) movably mounted to the power source frame (F), each mower deck (67) movably mounted to one side area of the power source frame (F) such that the power source frame (F) lies between the two mower decks (67) and wherein each mower deck (67) is operative to move independently of the power source frame (F);

e. each mower deck (67) having a blade (72) associated therewith for cutting grass;

f. a drive (16, 27, 31) extending from the power source frame (F) to each of the mower decks (67) and wherein the drive (16, 27, 31) transfers power from the internal combustion engine (15) to each of the mower decks (67) so as to drive the blades (72) associated with the mower decks (67);

g. each mower deck (67) being movable with respect to the power source frame (F) from a lowered operative position for cutting grass to an elevated stowed position;

h. wherein in the elevated stowed position each mower deck (67) is turned at least partially on the mower deck's (67) side such that an underside of the mower deck (67) faces outwardly or at least slightly upwardly; and

i. wherein the mower decks (67) are exclusively driven by the internal combustion engine (15) mounted on the power source frame (F) that in operation trails the tractor, as per claim 18; and

wherein each mower deck (67) is pivotally connected to one side of the power source frame (F) through one or more pivot connections (85) that permit each mower deck (67) to swing about a longitudinal axis that extends adjacent the side area of the power source frame (F), as per claim 19.

(10) Response to Argument

Claims 1, 2 and 34 disclose two mower decks rotatably mounted to a wheeled main frame having a power source mounted thereon. The mower decks must be movable through an angle of at least 91 degrees.

The appellant argues that the mower decks of Miller cannot rotate through an angle of 91 degrees as there are numerous structural obstacles preventing the rotation. However, the examiner has rejected claim 1 by combining Miller et al. in view of Aron. Miller discloses the gang mower structure; Aron is used to show that arms holding agricultural equipment are known to fold through 90 degrees. Contrary to the appellant's arguments, the test for obviousness is not whether the features of Aron may be bodily incorporated into Miller et al.'s structure; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Instead, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In this case, it is Aron that teaches it is desirable to fold the arms at through a 90 degree angle in order to reduce the bulk of the device for transportation purposes. It naturally follows that it would be desirable to fold Miller et al.'s mower decks (67), which are already foldable for transportation purposes, to an angle of 90 degrees.

Furthermore, the appellant admits in the specification that the degree of rotation afforded to the respective mower decks can vary and is simply a matter of changing various structural dimensions (see page 17, lines 1-5).

The appellant argues that the examiner's motivation for combining Aron and Miller et al. is based on impermissible hindsight. The examiner recognizes that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. In this case, the folding of a device for transportation purposes is old and well-known in the art.

The appellant argues that Aron does not teach a rotation through an angle of at least 91 degrees. The examiner would like to point out that the appellant has failed to describe any criticality associated with a 91 degree angle. As a matter of fact, the specification merely states that the mower deck, when shown in the stowed position in the drawings, is rotated through "an angle greater than 90 degrees" such that the underside "is said to face outwardly or at least partially upwardly" (see page 16, lines 19-22). The specification does not disclose an angle of 91 degrees and only provides for an angle greater than 90 degrees, wherein 90.1 degrees would suffice. In light of the appellant's failure to show criticality for the 91 degree angle, a prima facie case of obviousness exists since the folding range shown by Aron appears to be close enough to have the same properties as the claimed 91 degrees. In other words, one of ordinary skill in the art would expect the two angles to have the same properties and the appellant has failed show otherwise.

Regarding claims 4 and 30, the appellant argues that Allison does not disclose a drive belt having a tensioner and that the motivation for combining Allison with Miller does not present a case for obviousness. However, it can be seen that Allison does indeed show a mower deck having a belt drive and a tensioner. Allison teaches that it is known in the art to provide belt drives and tensioners to lawnmowers. This takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made.

Regarding claim 10, the appellant argues that Miller et al. teaches away from caster wheels. While Miller may teach away from the idea, Torras shows that providing caster wheels to a mower deck is old and known in the art and thus provides the necessary teaching.

Regarding claim 11, the appellant argues that Miller fails to disclose a belt drive guard. Erdman discloses that it is beneficial to provide a guard to a drive system of a lawnmower. That Miller does not disclose a belt drive is an irrelevant point. As for the motivation for combining Erdman with Miller, the motivation to provide protection should be enough, as lawnmowers require their drive systems for operation.

Regarding claims 23-25, 28 and 33, the appellant argues that the examiner's motivation for combining the tongue of Bottenberg on the mower deck of Miller et al. is erroneous. The fact that the appellant recognizes another advantage which would flow naturally from following the suggestion of Bottenberg cannot be the basis for patentability when the differences would otherwise be obvious. That Bottenberg includes a pivoting tongue on his mower for a reason different than that of the appellant is irrelevant.

(11) Related Proceeding(s) Appendix

Art Unit: 3671

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alicia M Torres/

Alicia Torres

/Thomas B Will/

Supervisory Patent Examiner, Art Unit 3671

Conferees:

Thomas B. Will /tbw/

Darnell Jayne /dj/